

ABSTRACT OF THE DISCLOSURE

A gamut error false color display uses false coloring on a monochrome image of a video picture being tested. Composite and component gamut error signals are extracted from an input video signal representing the video picture being tested. Such error signals may represent gamut error states corresponding to near out-of-gamut, out-of-gamut high, near out-of-gamut low, out-of-gamut low, etc. A false color display generator has the gamut error signals and a luminance component of the input video signal as inputs and outputs the gamut false color display as the monochrome image with different colors for those pixels in the monochrome image that correspond to the gamut error signals when a gamut error is indicated. Each display component may be tested for gamut errors as well as the video picture as a whole (component or composite). Also either fixed or variable persistence may be used to identify gamut errors over several video pictures in the input video signal. A counter may be used to count the gamut errors detected in order to take a "snapshot" of the gamut error display when a predetermined error limit is reached.